IMPLANT SYNDROME

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Over the years the American public is becoming bionic due to the advances in surgery for end stage disease. Some people have four or more synthetic implants which can disturb homeostasis. Synthetic implants, though helping many people, can cause harm in some. If hypersensitivity of the implant material occurs the clinician can often treat the sensitivity and save the implant.

There are many synthetic insertions, of which there are over 200 various types available. These implants include dental fillings and implants, abdominal mesh, vascular grafts, heart valves, false teeth and eyes, lens implants, artificial joints and repairs for traumatic injuries. Some of these patients have developed severe chemical sensitivity and chronic fatigue which often goes unrecognized causing malfunction and incapacitation in some patients. The mammoplasty syndrome from both paraffin and silicone has also been associated with autoimmune disease and now chemical sensitivity. We have seen over 200 patients with food and chemical sensitivity with breast implants. One hundred had these removed and intradermal neutralization of these synthetics accomplished, which helped reduce their sensitivity markedly. The other 100 left the implants in. Their clinical courses have been much rockier in that the patients are more fragile with a great propensity for multiple health problems including recurrent sinus and respiratory infection, fibromyalgia and chronic fatigue, etc. (See Rea, *Chemical Sensitivity*, Volume III, Chapter 19[1] and *Chemical Sensitivity*, Volume IV, Chapter 41.[2])

A classic model for the induction of chemical sensitivity has now been devised. The surgical use of artificial implants can induce both autoimmune disease and chemical sensitivity. Animal and

human studies of artificial organs as long ago as 30 years showed tissue reactions, which caused local fibrosis as well as triggering of the clotting mechanisms. This was graphic when metal, Teflon, and Dacron were first used for heart valve replacement. Anticoagulants had and still are used to prevent this potentially lethal condition. Since the early use of artificial implants was confined to life-threatening procedures where the individual would either die or lose a major organ, this fibrotic or clotting complication long-term anticoagulant treatment was justified. As surgery became more expansive, it was thought that silicone injections and then implants could be used for cosmetic purposes. However, silicone injections of the face and breasts were fraught with many complications including severe inflammation and tissue sloughing. They were, therefore, abandoned. Following these silicone implants, synthetic meshes of various plastic materials were used in repairs of large hernias. These synthetic meshes were moderately successful, and their use spread to repair smaller openings. The following are two case reports of the severe complications that one can develop after mesh implants.

> **Case Study #1.** A 45-year old white female was well until she had a large abdominal hernia repaired with a synthetic mash graft. When she awoke from surgery, she had severe asthma (which she had never had before) that was intractable to all forms of treatment. She became cortisone dependent, requiring 80 to 100 mg of prednisone per day in order to survive, even though the asthma continued to incapacitate her. She became very odor sensitive, developing all the classic signs and symptoms of chemical sensitivity. She also developed autoimmune disease with Raynaud's phenomenon, spontaneous bruising, peripheral and periorbital edema, and cold sensitivity. This patient underwent challenge testing and was found to be sensitive to toxic chemicals and electromagnetic fields. Removal of the abdominal mesh resulted in immediate cessation of the asthma, which had been present since its insertion 5 years earlier. The chemical sensitivity diminished rapidly, but the electrical sensitivity persisted. The patient lost her need for prednisone and lost her sensitivity to chemicals. She improved markedly with pollutant avoidance techniques and nutritional supplementation.

Case Study #2. A 40-year-old white male college professor already was suffering from severe chemical sensitivity with Raynaud's syndrome. He developed an inguinal hernia. He told the surgeon not to use synthetics under any circumstances. He awoke from surgery with excruciating pain, which was out of proportion to the surgery and his Raynaud's phenomenon was worse. He immediately developed a swollen, red, inflamed wound, and after many trials of antibiotics, the graft had to be removed. After removal of the synthetic graft he was immediately relieved of the pain, the recurrent infection, as well as the symptoms of Raynaud's. He has had no problems and uses no medication five years after removal.

Autonomic disease with arthralgia, fibromyalgia, chronic fatigue, and organic brain syndrome has been seen upon examination in the majority of patients with breast or any implants. These symptoms subside with removal of the implants and their capsules, although injection therapy for secondary sensitivities to biological inhalants, and synthetic implant antigens, foods, chemicals, as well as heat depuration/physical therapy is necessary in some patients. (For details of the implant-induced disease, see Rea, *Chemical Sensitivity*, Volume III, Chapter 19,[(1)] and *Chemical Sensitivity*, Volume IV, Chapter 41.[(2)])

The metal implant syndrome does not appear to cause as severe autoantibody reactions as the silicone does but they can trigger food and chemical sensitivity. However, metals can cause local and general inflammation resulting in severe pain and, at times, fibromyalgia, chronic fatigue, headache, and chemical sensitivity. The metal implant syndrome is particularly seen in jaw, hip, and knee implants (Table I) as well as screws, plates, and other metals which are often used for trauma patients. Some have developed full blown chemical sensitivity and/or chronic fatigue after the implantation.

Table I: Metal Implants in Patients with Chemical Sensitivity at the EHC-Dallas

Materials Confirmed by Intradermal Testing	No.	Materials Confirmed by Intradermal Testing	No. Patients Sensitive To Implants
Dental (bridge)	20	Stainless steel	103
Jaw	22	Nickel and nickel $S0_4$	24
Hips	20	Chromium-Cobalt	20
Steel clips	20	Zinc + Zinc sulfate	17
Knee	14	Titanium (pure)	16
Rods-long bones	10	Titanium (alloy)	14
Dental fillings	50	Silver	13
Skull	5	Aluminum	13
Pacemaker	4	Mercury	13
Heart valves	2	Vanadium	8
Defibrillator	2	Porcelain	7
Toe	2	Gold	4
Intravertebral discs	2	Copper	3
Shoulder	2	Palladium	3
Screws	20	Tin	2
		Cadmium	2
		Platinum	1
		Zirconium	1
		Molybdenum	1

Notes:
* Titanium alloy contains titanium, chrome, cobalt, nickel, and molybdenum
+ Most patients had the amalgams removed before we saw them
Ages: 25-87 years; mean = 56 years
Gender: Female = 65; male = 35
Source: EHC-Dallas. 2010.

In other people with chronic disease, it is necessary to test all implant components since minor metals can cause pain. The following report is an example.

> **Case Study**. A 22 year-old-white-female had a traumatic injury to her jaw necessitating bilateral titanium alloy implants. She continued to have excruciating jaw pain refractive to morphine. She tested negative to the major components of the implant. These included titanium, copper, cobalt, nickel, and aluminum. However, when she tested on molybdenum, which made up 4% of the implant, she reproduced all of her excruciating jaw pain. She was given subcutaneous injections of the neutralizing dose of the molybdenum

antigen daily for 2 weeks and then every four days. After 3 months, her pain stopped completely and she was able to stop her injections. A six-year follow up has shown no return of the pain or use of medications.

Control of the metal implant syndrome is not always so easy in the patient who is already chemically sensitive, but with persistence, it can be done. Another example follows.

Case Study. A 56-year-old-white-female with chemical sensitivity developed a heart block and had to have a permanent pacemaker implanted. The pacemaker was made of titanium and silicone. The patient immediately developed excruciating incisional pain, which persisted after the wound healed. She then developed arthritic-like swelling and pain in all her joints. These symptoms became incapacitating as she could barely walk. Skin testing by the intradermal provocative neutralization techniques showed she was sensitive to titanium and silicone. She was given injections of the neutralizing dose of titanium and silicone for her pain and arthritic-like condition. This neutralizing dose injection continued until her symptoms gradually subsided after a 2-month period. She was asymptomatic for over 2 years until she had a battery failure. Her power box was replaced and she developed symptoms all over again. She was re-neutralized for the new make of metal, and for four years, she is now asymptomatic, as long as she takes her neutralizing injections.

Reactions to metal implants are usually easier to treat than those of organic synthetics like silicone, Dacron™, polyethylene, Teflon™, etc. If the patient shows signs of multiple sensitivities and he or she needs implants, the components can be tested and, at times, it is possible to ask the manufacturer to fashion the implants without the offending substances. In sensitive patients with chemical sensitivity and/or chronic degenerative disease, the author urges implant testing by this intradermal provocation neutralization technique before the implant is placed in the body.

Table II: Non-Metal-Synthetic Implants In Patients With Chemical Sensitivity

Type Implant	Synthetic	Patients With Sensitivity
Lens	Acrylic	10
	Methylmethacrylate	40
	Silicone	10
Mesh		
Inguinal	Polypropylene	10
Abdominal	Polyethylene	20
Bladder sling	Polyurethane	10
Breast	Silicone	40
	Saline w/plastic encasing	40
Chin	Silicone	8
Vascular	Dacron	15
	Polypropylene	10
Lip	Silicone	2
Cornea	Silicone	1
Hormonal	Polypropylene	10
Miscellaneous	Teflon	10
Teeth Bond	Duralon cement	40
	All bond	
	Malcilic – prodigy	
	Epoxy	
	Photobond	

Since implants are becoming so common place, the physician should not overlook artificial implants as part of their diagnosis in chronic degenerative disease and/or chemical sensitivity.

Problems with the teeth and synthetic fillings have been common knowledge as initiators and propagators of disease. Now one has to consider the various synthetic implants as to their influence in the triggering and propagating of chronic diseases and/or chemical sensitivity. Removal when possible and intradermal neutralization (if the implant is necessary) should be the rule of the day!

References

1. Rea, WJ. 1996. Chemical Sensitivity, Vol. 3: Clinical manifestations of pollutant overload, p. 1195. Boca Raton, FL: Lewis Publishers.

2. Rea, WJ. 1997. Chemical Sensitivity, Vol. 4: Tools of Diagnosis and methods of treatment, p. 2803. Boca Raton, FL: Lewis Publishers.